

**NOTICE OF PROBABLE VIOLATION
AND
PROPOSED CIVIL PENALTY**

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 2, 2000

Mr. Carl Gast
Vice President and General Manager
Equilon Pipeline Company LLC
Olympic Pipeline Company
2319 Lind Avenue S.W.
Renton, WA 98057

CPF No. 5-2000-5013

Dear Mr. Gast:

On June 10, 1999, the Olympic Pipeline (Olympic), owned and operated by Equilon Pipeline Company LLC, experienced a release from their sixteen-inch diameter pipeline near the water treatment facility at the east end of Whatcom City Park. Representatives of the Western Region, Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code, conducted an investigation into the cause of the release. During the course of the investigation, Olympic's manuals and records were reviewed in detail in an effort to determine if all applicable procedures were in place, were adequate, and were followed prior to, during, and after the June 10, 1999, release.

As a result of the investigation, it appears that you have committed probable violations, as noted below, of pipeline safety regulations, Title 49, Code of Federal Regulations, Parts 195 and 199. The items inspected and the probable violations are:

1. **§195.442 Damage Prevention Program. . . . (c) The damage prevention program required by paragraph (a) of this section must, at a minimum: . . . (6) Provide as follows for inspection of pipelines that an operator has reason to believe could be damaged by excavation activities: (i) The inspection must be done as frequently as necessary during and after the activities to verify the integrity of the pipeline;**

During the investigation, the OPS requested numerous documents in an effort to determine if Olympic personnel adequately monitored construction activities at the water treatment facility during and after the installation of multiple, large diameter water lines over the Olympic sixteen-inch products pipeline in 1994. This monitoring was critical to verifying the integrity of the pipeline considering the extensive excavation that occurred near the pipeline during this period. There are three documents that have been provided to the OPS that indicate that an Olympic employee was at the construction site on three separate days. Two of these documents detail line crossing construction activities on May 19, 1994 and August 11, 1994, and substantiate that Olympic employees were monitoring the excavation. The third document is a copy of field notes from the construction supervisor for the water treatment plant project which states that an Olympic representative was on site on July 6, 1994.

Olympic has only accounted for three (3) days of inspection during the approximate eight (8) month project. This appears to indicate that inspections were not done as frequently as necessary to verify the integrity of their pipeline. Furthermore, the extensive outside force damage in the vicinity of the June 10, 1999 rupture site confirms that Olympic personnel did not adequately monitor the pipeline during at least one critical phase of this known, long term construction project.

2. **§195.401 General requirements. . . . (b) Whenever an operator discovers any condition that could adversely affect the safe operation of its pipeline system, it shall correct it within a reasonable time. However, if the condition is of such a nature that it presents an immediate hazard to persons or property, the operator may not operate the affected part of the system until it has corrected the unsafe condition.**

During the investigation, the OPS requested and reviewed numerous documents in an effort to determine when the anomalies were discovered on the line segment in the vicinity of the Whatcom Creek Park. OPS discovered that Olympic personnel surveyed this line segment in 1996 with a magnetic flux leakage (MFL) internal inspection device. This device is intended to measure metal loss defects in the pipe wall. Furthermore, Olympic personnel surveyed this line segment in 1997 with a deformation internal inspection device. This device is intended to measure the roundness of the pipe.

The 1996 MFL survey reported a 23% metal loss anomaly, a “possible wrinkle bend” and a “possible mash” in the vicinity of the Whatcom City Park. The 1997 geometry survey reported a 0.45 inch “sharp” indication in the same general area as the other reported anomalies. These conditions, particularly when grouped together, are of the type that could adversely affect the safe operation of a pipeline.

The OPS requested and received documentation concerning these anomalies. Olympic submitted a 1997 document containing a detailed drawing of this area which identifies Olympic stationing distances, 1996 anomalies, and 1997 anomalies. The document contains statements which indicate that Olympic personnel intended to promptly investigate these anomalies.

In a letter entitled, "REQUEST FOR SPECIFIC INFORMATION" dated, September 9, 1999, the OPS requested the following information:

Please provide a detailed written explanation of why Olympic did not excavate the anomaly reported by Enduro at wheel count 843 + 69, and the anomalies reported by Tuboscope as a "possible wrinkle bend" at wheel count 84402 and a 23% defect 0.4 inches long with a "possible mash" at wheel count 84416, in the vicinity of the water treatment facility located at 3201 Arbor Street, Bellingham, Washington, 98226. It appears from our analysis that Olympic was working toward the excavation of these anomalies up to and including obtaining an authorization for expenditure (AFE 95080) and making a "one-call" and then no excavation was performed. In addition, please provide a copy of AFE 95080, the One-Call ticket received for the work and any other internal or external, written or electronic correspondence concerning canceling this excavation.

Olympic's written response to the request, in part, is as follows:

Olympic's investigation into this issue and other related issues is continuing. Further, Olympic's response is limited because certain Olympic employees with personal knowledge relevant to this question are unavailable to provide information, because of the pending federal criminal grand jury investigation. . . . Olympic is currently attempting to obtain more information responsive to this question, and will supplement this answer when new information is received. This effort includes attempts to locate a copy of a letter sent to the Washington Department of Ecology (WA-DOE) in 1997 which may contain information that relates to this question.

The OPS contacted the WA-DOE and requested a copy of the letter referenced above. The OPS received a copy of the letter from Olympic to the WA-DOE on October 19, 1999. The original letter was dated May 22, 1997, and there is a date stamp from the WA-DOE dated May 27, 1997. There was a spreadsheet titled, "SUMMARY OF 1997 CALIPER PIG INSPECTION AND FIELD INVESTIGATION", attached to the letter. On the first page of the spreadsheet, the geometry anomaly at the water treatment facility was identified and under the column heading, "Scheduled or actual investigation 1997", it states, "May". This is further evidence that Olympic intended to promptly excavate this anomaly identified by the 1997 geometry survey but ultimately did not.

3. **§195.403 Training. (a) Each operator shall establish and conduct a continuing training program to instruct operating and maintenance personnel to:**
- (1) Carry out the operating and maintenance, and emergency procedures established under 195.402 that relate to their assignments;**
 - (2) Know the characteristics and hazards of the hazardous liquids or carbon dioxide transported, including, in the case of flammable HVL, flammability of mixtures with air, odorless vapors, and water reactions;**
 - (3) Recognize conditions that are likely to cause emergencies, predict the consequences of facility malfunctions or failures and hazardous liquid or carbon dioxide spills, and to take appropriate corrective action;**
 - (4) Take steps necessary to control any accidental release of hazardous liquid or carbon dioxide and to minimize the potential for fire, explosion, toxicity, or environmental damage;**
 - (5) Learn the proper use of firefighting procedures and equipment, fire suits, and breathing apparatus by utilizing, where feasible, a simulated pipeline emergency condition; and**
 - (6) In the case of maintenance personnel, to safely repair facilities using appropriate special precautions, such as isolation and purging, when highly volatile liquids are involved.**
- (b) At intervals not exceeding 15 months, but at least once each calendar year, the operator shall:**
- (1) Review with personnel their performance in meeting the objectives the training program set forth in paragraph (a) of this section; and**
 - (2) Make appropriate changes to the training program as necessary to ensure that it is effective.**
- (c) Each operator shall require and verify that its supervisors maintain a thorough knowledge of that portion of the procedures established under 195.402 for which they are responsible to ensure compliance.**

During the investigation, the OPS requested numerous documents in an effort to determine if the Olympic personnel who were in the control room on June 10, 1999, had received continuing training. In a letter entitled, "REQUEST FOR SPECIFIC INFORMATION" dated, August 9, 1999, the OPS requested the following information, "Please provide copies of all training records for the two controllers, computer support technician, and supervisor that were

on duty during the hours of 8:00 a.m. and 6:00 p.m. on June 10, 1999, for the period of time from January 1, 1994, to the present.” Olympic’s response to that letter stated in part,

Attached (Attachment F) are the training records for the computer support technician and the supervisor that were on duty on June 10, 1999. Copies of training records for the two controllers identified above were previously provided to the NTSB under production number four, document numbers 0622 - 0639 and 0640 - 0654. We understand copies were forwarded to the DOT/OPS. Please let us know if this is not the case.

The following table summarizes the training documents provided for each person.

Individual	Training Document	Document Date
Controller #1	E-mail from manager stating that this person has completed the Pipeline Simulator Workshop	May 21-23, 1990
Controller #1	Job Performance	24 June 91
Controller #1	Performance and Development Review	5-28-92
Controller #1	Certificate of Completion/OPA 90 training	8-16-93
Controller #1	Performance and Development Review	1-21-94
Controller #1	Certificate of Completion/8 hour OSHA Annual Refresher Class	February 27, 1997
Controller #1	Certificate of Completion/8 hour OSHA Annual Refresher Class	February 26, 1998
Controller #2	Satisfactory Completion/Shell Pipe Line Corporation Operations Training	11/14/90
Controller #2	Job Performance	21 JUNE 1991

Controller #2	Performance and Development Review	5-28-92
Controller #2	Performance and Development Review	1-25-94
Computer Support Technician	Certificate of completion/certification as Operations Controller	17 October 1994
Control Center Supervisor	Aviation-Air Traffic Control First Aid/CPR Media Relations Training Oil Movement Controllers Workshop Fire Training Exercise Intro to Emergency Procedures Manual DOT Drug Testing for Supervisors	1971 16 OCT 89 05 DEC 89 11 MAY 90 22 MAY 90 25 MAY 90 04 JUN 90
Control Center Supervisor	E-mail from manager stating that this person has completed the Pipeline Simulator Workshop	OCT. 22-24, 1990
Control Center Supervisor	Certificate of Completion/8 hour OSHA Annual Refresher Class	March 18, 1993
Control Center Supervisor	Certificate of Completion/OPL's 1993 Driver Improvement Program	May, 1993
Control Center Supervisor	Certificate of Completion/OPA 90 training	12 August 1993
Control Center Supervisor	Certificate of Completion/Power Writing	October 18-19, 1993

Control Center Supervisor	Certificate of Completion/8 hour OSHA Annual Refresher Class	March 15, 1994
Control Center Supervisor	Certificate of Completion/Managing Multiple Projects, Objectives and Deadlines	8 April 1994
Control Center Supervisor	Acknowledgment of Receipt- Supervisor Workbook-Texaco's Alcohol & Substance Abuse Program Supervisor Workbook	12/13/94
Control Center Supervisor	Certificate of Completion/8 hour OSHA Annual Refresher Class	March 6, 1996
Control Center Supervisor	Certificate of Completion/OPL's Spill Response Plan Training	March 11, 1996
Control Center Supervisor	Certificate of Attendance/Transportation Safety Institute Hazardous Liquids Pipeline Seminar	February 19 - 20, 1997
Control Center Supervisor	Certificate of Completion/Completion/8 hour OSHA Annual Refresher Class	February 25, 1998
Control Center Supervisor	Certificate of Completion/Incident Command System (ICS) Orientation (4 Hours)	March 19, 1998
Control Center Supervisor	Course Completion/The AAA Driver Improvement Program	June 11, 1998
Control Center Supervisor	Certificate of Completion/8 hour OSHA Annual Refresher Class	April 1, 1999

With the exception of initial controller certification and OSHA training, Olympic did not provide documentation that any of these particular employees were part of a continuing training program for all of the requirements of Part 195.403. In the absence of a procedure or policy on the extent, scope, and documentation of employee training, it was impossible to determine whether the key control room staff were adequately trained and part of a continuing, effective training program. Section 195.403 clearly contemplates more than an uncoordinated and imprecise informal approach to training in the safe operation of a pipeline.

4. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(a) General. Each operator shall prepare and follow . . . a manual of written procedures for . . . handling abnormal operations . . . (d) Abnormal operation. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded: . . . (2) Checking variations from normal operation after abnormal operation has ended at sufficient critical locations in the system to determine continued integrity and safe operation.

On June 10, 1999, the Supervisory Control and Data Acquisition (SCADA) system was not working properly. This caused the operators to take actions to abnormally shutdown the pipeline. Olympic did not provide any documentation that critical locations on the pipeline system were checked after this abnormal shutdown. Nonetheless, the controller restarted the sixteen-inch pipeline system.

It appears that after review of documentation and subsequent analysis, the release occurred during the abnormal shutdown of the pipeline. When the abnormal event with the SCADA system had ended and the line was restarted, there could not have been any flow into the BPT as the release had already occurred. However, Olympic continued to operate the pumps at the Cherry Point and Ferndale stations for fifteen (15) minutes. Only after the leak detection system (PLDS) alarmed and the pumps at Cherry Point and Ferndale went down on low suction, did the controller start shutting down and isolating the pipeline segment.

5. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline system commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

During the investigation, the OPS requested numerous documents in an effort to determine if Olympic had prepared and followed appropriate procedures required by Federal regulations. Olympic provided copies of the Operations Manual for Controllers, and appropriate sections of their Operations and Maintenance Manual that were in effect at the time of the release on June 10, 1999. After conducting an in depth review of these documents, there are numerous manual sections where Olympic did not incorporate procedures for the BPT before initial operations there commenced in December 1998. Details are summarized below:

On page 6 of 24, Section 3 of the Miscellaneous Operations section of the Operations and Maintenance Manual, all utility tanks are listed except the BPT utility tank. On page 10 of 24 in Section 3, there are 2 tables of delivery facilities that do not include the BPT. On page 13 of 24, there is a table containing each circuit and the corresponding facility which it controls. The BPT is not represented in this table. On page 14 of 24, there is a table of line fills and displacements. The lines from the BPT to the Allen Station are not included. On the same page there is a table of base volume capacities that does not include the BPT to Allen segments. On page 21 of 24 there are procedures for the restart of the 16" line which includes a table of shut down pressures that does not include the BPT. On page 22 of 24 there is a list of step by step restart guidelines. The BPT is not mentioned in these procedures. On page 23 of 24, there is a list of step by step shutdown guidelines. The BPT is not mentioned in these procedures.

6. §195.262 Pumping equipment. . . . (c) Each safety device must be tested under conditions approximating actual operations and found to function properly before the pumping station may be used.

During the investigation, the OPS requested numerous documents in an effort to determine if any of the relief valves, including the one identified as RV 1919, on the Ferndale incoming line at the Bayview Products Terminal (BPT) were tested prior to placing the BPT in service on December 3, 1998. Olympic has not provided any documentation confirming any relief valve testing under conditions approximating actual operations prior to the BPT being placed in service.

Concerning relief valve RV1919, the only documentation, received by OPS, prior to placing the BPT in service, indicated that on November 18, 1998, RV1919 was checked at the set point of 650 psig. This check was a static pressure check and not a check under flow conditions. Furthermore, there were many instances within weeks of placing the BPT into service where relief valve RV 1919 did not relieve at its set point:

1. During 27 scheduled shutdowns for the Ferndale to Woodinville pipeline segment from December 10, 1998 - May 24, 1999, seven resulted in a high enough pressure to close the isolation valve (MV1902 - set point of 700 psig) upstream of the BPT.

2. During 34 unscheduled shutdowns for the Cherry Point to Woodinville pipeline segment from December 20, 1998 - May 24, 1999, 23 resulted in a high enough pressure to close the isolation valve (MV1902).

These instances and others appear to verify that RV 1919 could not have been properly tested under conditions approximating actual operations and could not have been found to be functioning properly prior to the BPT being placed in service. Furthermore, Olympic did not provide any documentation showing that RV 1919 had been tested prior to the June 10, 1999, release.

7. **§195.402 Procedural manual for operations, maintenance, and emergencies.**
(a) General. Each operator shall prepare and follow . . . a manual of written procedures for . . . handling abnormal operations . . . (d) Abnormal operation. The manual required by paragraph (a) of this section must include procedures for the following to provide safety when operating design limits have been exceeded: (1) Responding to, investigating, and correcting the cause of: (i) Unintended closure of valves or shutdowns; . . .

As reported by Olympic, the isolation valve (MV 1902) closed uncommanded over fifty (50) times since the BPT was incorporated into Olympic's pipeline system. Olympic also reported that forty-one (41) of these events were due to a high pressure at the BPT. Olympic was aware of and did not investigate these abnormal occurrences. Procedures on page 13 of 16 of section 6, item C of Olympic's Operations and Maintenance Manual state:

DOCUMENTATION AND REVIEW OF ABNORMAL EVENTS.

Any operation that deviates from the normal mode of operations must be documented by the Operations Controller and by the field personnel involved. This information must include the best and most accurate information available and contain a description of: operations prior to the event, the abnormal event, corrective and final action taken. This information is invaluable to prevent the same situation from occurring again and to assist personnel in rectifying this event.

The Supervisor of Operations will periodically review the response of operations personnel to determine the effectiveness of the procedures controlling abnormal operations and take corrective action where deficiencies are found.

There is no record of Olympic personnel responding to, investigating, and correcting the cause of the repeated uncommanded valve closures at the BPT or the repeated failures of the relief valve to open appropriately. These devices are considered to be safety devices designed to protect the BPT, and directly affect mainline operating pressures.

8. **§195.404 Maps and Records. . . . (b) Each operator shall maintain for at least 3 years daily operating records that indicate - (1) The discharge pressure at each pump station; and (2) Any emergency or abnormal operation to which the procedures under §195.402 apply.**

During the investigation, the OPS requested numerous documents in an effort to determine the discharge pressure at the Ferndale pump station, the pump station directly upstream of the release site, and any abnormal conditions that occurred on the line segment from the Cherry Point to the Allen Station prior to the June 10, 1999, release. Olympic stated that the recording chart for the discharge pressure at the Ferndale pump station had run out of paper on the afternoon of June 9, 1999, and therefore, they could not provide this data.

Olympic also responded to OPS inquiries regarding the recording of abnormal events at the BPT by submitting numerous records concerning valves, maintenance logs and e-mails. These records were reviewed and provided no indication that any records existed documenting the unintended closure of the BPT upstream isolation valve or the malfunction of the relief valve on the Ferndale line (RV1919) in the BPT.

Under 49 United States Code §60122, you are subject to a civil penalty not to exceed \$25,000 for each violation for each day the violation persists up to a maximum of \$500,000 for any related series of violations. Upon preliminary review of the assessment considerations, we propose assessment of a civil penalty as follows:

Item 1-Damage Prevention Records	= \$25,000
Item 2- Not correcting an unsafe condition	= \$500,000 (capped)
Item 3- Training	= \$500,000 (capped)
Item 4-Not checking sufficient locations after an abnormal event	= \$25,000
Item 5-Not updating and following procedures	= \$500,000 (capped)
Item 6- No testing of RV 1919	= \$500,000 (capped)
Item 7-Not Responding to and correcting abnormal conditions	= \$500,000 (capped)
Item 8-Discharge pressure/abnormal event records	= <u>\$500,000 (capped)</u>
Total	<u>= \$3,050,000</u>

Enclosed is a description of the available procedures for responding to this Notice. Please note that if you elect to make a response, you must do so within 30 days of receipt of this Notice or waive your rights under 49 CFR 190.209. No response or a response which does not contest the allegations in the Notice authorizes the Associate Administrator, OPS, to find the facts to be as alleged herein and to issue appropriate orders. The 30-day response period may be extended for good cause shown and submitted within the original 30 days.

Please refer to **CPF No. 5-2000-5013** in any correspondence on this matter.

Sincerely,

Chris Hoidal
Director

Enclosure